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XXXIV. *A remarkable Case of numerous Births, with Observations.* By Maxwell Garthshore, M. D. F. R. S. and A. S. in a Letter to Sir Joseph Banks, Bart. P. R. S.

Read June 21, 1787.

TO SIR JOSEPH BANKS, BART. P. R. S.

S I R,

St. Martin's-Lane. May 28, 1787.

THE following very extraordinary case, communicated to me by Dr. BLANE, F. R. S. I take the liberty, at his desire, to transmit to you, with his letter to me, containing the proofs of its authenticity; hoping that it will appear to you, as it did to us, worthy of being read at one of the meetings of the Royal Society, as a fact in natural history, which is equally uncommon, curious, and well vouched. In order, however, to make its singularity more apparent, I have taken the liberty to subjoin some observations on births of this kind, with such well authenticated accounts of similar events as I have been able to procure, confining myself chiefly to those which have happened in our own country, where we are least likely to be deceived.

I have the honour to be, &c.

MAXWELL GARTHSHORE.

P. S. As one proof of its singularity, I, many months ago, employed various friends at Peterburg, Berlin, Vienna, Lyons, Paris, and Ghent, to collect for me well authenticated cases of this kind, and I have not as yet been able to procure any.

Copy of a letter from Dr. BLANE, Physician to his Majesty's Navy and to St. Thomas's Hospital, F. R. S. to Dr. Garthshore, Physician to the British Lying-in Hospital.

DEAR SIR,

Sackville-Street, June 22, 1786.

A few days ago, I received from the country an account of a woman who was delivered of five children at a birth in April last. As your extensive experience and reading in this line of practice enable you to judge, how far this fact is rare or interesting, I submit it to you, whether it deserves to be communicated to the Royal Society. Mr. HULL, the gentleman who sent me the case, is a very sensible and ingenious practitioner of physic at Blackburn, in Lancashire. He attended the labour himself from beginning to end, and his character for fidelity and accuracy is well known to me, as he was formerly a pupil at the hospital to which I am physician; so that no fact can be better authenticated. He mentions also, that he has preserved all those five children in spirits; and, if desired, he will send them for the inspection of the Society*.

I am, with great regard, &c.

GILBERT BLANE.

* They were accordingly sent; and having been exhibited to the Society when this Paper was read, are now deposited in the Museum of Mr. JOHN HUNTER.

MARGARET WADDINGTON, aged twenty-one, a poor woman of the township of Lower Darwin, near Blackburn in Lancashire, formerly delivered of one child at the full term of pregnancy, conceived a second time about the beginning of December 1785, and from that period became affected with the usual symptoms that attend breeding. At the end of the first month, she became lame, complained of considerable pains in her loins, and the enlargement of her body was so remarkably rapid, that she was then judged by her neighbours to be almost half gone with child. At the end of the second month she found herself somewhat larger, and her breeding complaints continued to increase. When the third month was completed, she thought herself fully as large as she had formerly been in her ninth month, and to her former symptoms of nausea, vomiting, lameness, and pain of the loins, she had now added a distressing shortness of breath. She continued to increase so rapidly in size, that she thought she could perceive herself growing larger every day, and she was under the frequent necessity of widening her cloaths. When she reckoned herself eighteen weeks gone, she first perceived somewhat indistinctly the motion of a child. By the 20th of April, 1786, all her complaints were become much more distressing; she had much tension and pain over all the abdomen, her vomiting was incessant, and she now could not make water but with the utmost difficulty. The symptoms being palliated by Mr. LANCASTER, she advanced in her pregnancy to Monday the 24th of April, when being supposed to have arrived at the twentieth week, she was seized with labour pains. These continued gradually to increase till the next day, about two in the afternoon; at which time I was sent for, Mr. LANCASTER being absent, and

and she was soon delivered of a small, dead, but not putrid, female child. The pains continuing, this was soon followed by a second less child; to this very soon succeeded a third, larger than the first, which was alive; to these a fourth soon followed, somewhat larger than the first, and very putrid; last of all, there soon succeeded a fifth child, larger than any of the former, and born alive. These five children were all females; two were born alive; and the whole operation was performed in the space of fifty minutes. The first made its appearance at two in the afternoon, and the last at ten minutes before three. Each child presented naturally, was preceded by a separate burst of water, and was delivered by the natural pains only. In a short time after the birth of the last, the placenta was expelled by nature without any hæmorrhage, was uncommonly large, and in some places beginning to be putrid. It consisted of one uniform continued cake, and was not divided into distinct placentulæ, the lobulated appearance being nearly equal all over. Each funis was contained in a separate cell, within which each child had been lodged; and it was easy to perceive, by the state of the funis, and that part of the placenta to which it adhered, in which sac the dead, and in which the living children had been contained. I examined the septa of the cells very carefully, but could not divide them as usual into distinct laminæ, nor determine which was chorion or which amnios. I could not prevail on the good women to allow me to carry it home, to be more narrowly inspected; and I submitted more readily to their prejudice for its being burned, as its very soft texture seemed to me to render it hardly capable to bear injection. The two living children having survived their birth but a short time, I was allowed to carry them home; and I have preserved the whole five in spirits, and have
since

since weighed and measured them, and find their proportions to be as follows in Avoirdupois weight, inches and parts.

		Oz.	Dr.		Inches.
The 1st born dead	- -	6	12	Length	9
The 2d — putrid	- -	4	6		$8\frac{3}{4}$
The 3d — alive	- -	8	12		$9\frac{1}{8}$
The 4th — putrid	- -	6	12		$9\frac{1}{8}$
The 5th — alive	- -	9	—		$9\frac{1}{8}$

The mother, in spite of the crowds with which her chamber was continually filled, continued to recover, and was able to be out of bed on the 27th and 28th, her third and fourth days; but finding herself then weak, by my advice, kept her bed till the 11th of May, when she went out of doors, and on the 21st walked to Blackburn, two miles distant. This was the 27th day from her delivery, she having entirely recovered her strength without any accident. It may not be improper to add, that the husband of this woman has been in an infirm state of health for three years past, and is now labouring under a confirmed phthisis.

I am, &c.

Signed, JOHN HULL.

Blackburn, Lancashire,
June 9, 1786.

Observations on numerous Births.

THOUGH the females of the human species produce most commonly but one child at a birth; and though their formation with only two breasts, and one nipple to each, renders it probable they were not originally intended to produce in general more than two; yet, from what we know of the womb and its appendages, and what from the latest experiments we are led to conjecture as to the mode of conception, we cannot presume *à priori* to set limits to the fertility of nature, nor determine decisively what number of foetuses may be conceived and nourished to a certain period in the human uterus at the same time.

The present singular and well-attested case assures us, that five have certainly been born at once, and we have no title absolutely to reject all the testimonies of even more numerous births, or to say that, in some rare instances, this number has never been exceeded.

What has tended to render relations of this sort ridiculous, and to throw a degree of discredit on the whole, is the many marvellous, and evidently absurd and incredible histories, which not only the retailers of prodigies, but even the credulous writers of medical observations, have collected.

I need only refer those, who wish to amuse themselves with surprising relations of this kind, to the curious collections of SCHENKIUS, SCHURIGIUS, AMBROSE PAREY, and others.

But, in order to shew how very uncommon births of this kind are, and how truly singular the case communicated by Mr. HULL to Dr. BLANE is, I take the liberty to subjoin a
short

short view of the usual course of nature in this matter among our own country-women, where we are least likely to be deceived.

Though female fertility certainly varies according to the climate, situation, and manner of life; yet, I believe, it may be taken for a general rule, that where people live in the most simple and natural state, if they are the best nourished, and if they enjoy the firmest health and strength, they will there be the most fertile in healthy children; but we have no *data* to determine that they will there have the greatest number at one birth.

At the British Lying-in Hospital, where we have had 18,300 delivered, the proportion of twins born has been only one in 91 births. In the Westminster Dispensary, of 1897 women delivered, the proportion of twins has been once in 80 births; but in the Dublin Lying-in Hospital, where above 21,000 have been delivered, they have had twins born once every sixty-second time. The average of which is once in 78 births nearly, in these kingdoms.

The calculations made in Germany from great numbers, in various situations, state twins as happening in a varied proportion from once every sixty-fifth to once every seventieth time.

But in a more accurate and later calculation made at Paris, by M. TENON, Surgeon to the Salpêtrière, we learn, that in 104,591 births the proportion of twins was only one in 96, which is only a small degree less than we have calculated at the British Lying-in Hospital.

It would be easy to add other calculations, all differing from these and from one another, more or less; but I hope these are sufficient to shew that nature observes no certain rule in this
matter;

matter; and that even twins, the most usual variation, is not a very common occurrence.

When we advance to triplets, or three born at once, we find comparatively very few instances in this or any other country; and though every one has heard of such events as now and then happening, yet very few have seen them.

In all those 18,300 women delivered at the British Lying-in Hospital, there has not been one such case. In the London Lying-in Hospital, where, being instituted later, much fewer have been delivered, they have had two such recorded as prodigies. In the Westminster Dispensary, in 1897 women delivered, there has been but one such event.

In the Dublin Hospital, in 21,000 births, they have had triplets born thrice, or once in 7000 times, but have never exceeded that proportion or number, born at one time.

In a pretty extensive practice of above thirty years, both in the county of Rutland and in London, I have attended but one labour where three children were born; am personally acquainted but with one lady who, at Dumfries, in Scotland, after bearing twins twice, was delivered of three children at once; and I was never acquainted with any one who produced a greater number.

Yet so much does this matter vary at Edinburgh, that Dr. HAMILTON, Professor of Midwifry, writes, he had seen triplets born there, five or six times in less than twenty-five years.

MAURICEAU, in a long life of very extensive practice at Paris, with opportunities of knowing most things extraordinary that happened in his time in France, tells us, he had seen triplets born but a few times; had heard of four in that city but once, and mentions no greater number.

One circumstance which he relates is so far worthy of attention, as it accords with one somewhat similar subjoined to Mr.

HULL's case now read, *viz.* "That the husband of one of
 "those women who bore three children was by trade a pain-
 "ter, and had been, for two years preceding this birth, para-
 "lytic over one-half of his body, and yet had no reason to
 "doubt the fidelity of his wife."

These facts, as far as they are to be depended on, may shew us, that the capacity of procreation in the male may remain under very infirm health; and that we ought to judge with candour of such wives as are fruitful when living with very ailing husbands, and who produce healthy children in the eighth, or even ninth, month after their death; as we can never say determinately under what degree of disease the male is totally incapable of procreation: more especially as we are very certain, that the female is not, when labouring under very desperate, and certainly fatal, diseases, provided the principal organs of generation be sound. Nay, in cases of pulmonary phthisis, the life of the female seems to be protracted by pregnancy; and I have attended a lady, who, after being pronounced irrecoverably hectic, lived long enough to be twice delivered naturally of healthy children at the full time.

But what particular circumstances of constitution, or state of health, can capacitate the male to become the father of more than one child at a birth, or how this could be effected, should it be wished, remains among those secrets of nature which our want of facts and observations renders us utterly incapable to speculate upon.

It seems probable, and these two observations, as well as SPALLANZANI's, and other late experiments, would rather incline us to suppose, that these numerous births do depend most on the structure and state of the female organs; but

nothing, that I know of, has ever been discovered in this obscure matter.

The occurrence of four born at once we find to be much more uncommon; and, I think, HALLER's conjecture rather than calculation of its happening once in 20,000 births, very much under-rated, as it appears that once in 100,000 would be much nearer the truth. Of this, however, we have several well authenticated cases which have happened in this island. In the year 1674, there was published in London a quarto pamphlet, intituled, "The fruitful Wonder, or a strange Relation, from Kingston upon Thames, of a Woman who, on Thursday and Friday, the Fifth and Sixth Days of this Infant March, 1673-4, was delivered of Four Children at one Birth, viz. Three Sons and One Daughter, all born alive, lusty Children, and perfect in every Part, which lived Twenty-four Hours, and then died, all much about the same Time, with several other Examples of numerous Births, from credible Historians, with the Physical and Astrological Reasons for the same. By J. P. Student in Physic."

Dr. PLOTT, in his History of Staffordshire, p. 194. mentions ELEANOR, the wife of HENRY DIVEN, of Watlington, who was delivered of four children at a birth in the year 1675.

Sir ROBERT SIBBALD, in his *Scotia Illustrata*, after mentioning a case of three born at once, adds, "Imo in variis regni locis repertæ sunt mulieres quæ quatuor foetus uno partu ediderunt;" but makes no mention of more.

In the Gentleman's Magazine, which is reckoned a pretty authentic record of the times, we have the following accounts of numerous births.

ANN BOYNTON, of Hensbridge, in Somersetshire, was this day, June 1, 1736, delivered of three daughters and one son; one of the daughters died, the rest are likely to live. The mother has been married but four years, and has had twice twins before, which completes the number of eight children at three births.

October 3, 1743, at Rate, in Berkshire, JOAN GALLO-WAY was delivered of two boys and two girls, three of whom were alive.

In January, 1746, the wife of PLUMER, a labouring man, at Mill-Wimley, near Hitchin, Hertfordshire, was delivered of three living boys and one dead.

August 22, 1746, the wife of WILLIAMS, of Coventry-street, Piccadilly, was delivered of two boys and two girls, all likely to live.

June, 1752, a woman in the parish of Tillicultrie, near Stirling, in Scotland, was delivered of four children, which were all immediately baptised, and all died at the same time next morning.

In September, 1757, a poor woman, of Burton Ferry, Glamorganshire, was delivered of three boys and a girl.

Dr. HAMILTON before mentioned writes, that, not many years ago, a woman was delivered of four children, at Penny-quick, the seat of Sir JOHN CLARK, Bart. near Edinburgh, when she was advanced to the middle of her last month of pregnancy, and that some of these children lived two or three years. He further says, that, five years ago, he attended a woman at Edinburgh, who, in the seventh month of her pregnancy, after a journey of thirty miles, was suddenly delivered of four children, all perfect and well grown for the time, of which one was born dead, and three alive; but those three

died next day. He further adds, that these are the only cases of quadruplets, or any larger number, he had ever heard of, as born in Scotland, in his memory.

Though cases similar to the present of five children born at once, are still much more uncommon; and though HALLER's assertion of their not happening above once in a million of births, may be reckoned a very moderate calculation, yet we are not altogether without such instances in this country.

From the Gentleman's Magazine we learn, that on the 5th of October, 1736, a woman at a milk-cellar, in the Strand, was delivered of three boys and two girls at one birth; and that in March, 1739, at Wells, in Somersetshire, a woman was delivered of four sons and a daughter, all alive, all christened, and all then seeming likely to live.

In the *Commercium Literarium Norimbergense* for the year 1731, we have two such cases; one happening in Upper Saxony, the other near Prague, in Bohemia; in each of which five children were born and christened, all of whom were arrived to that equal degree of maturity, which rendered it probable, they were all conceived about the same time.

I learned from two foreign Professors, when in London last winter, that they had each heard of a case of five children born near Paris, and near Ghent in Flanders; but the particulars not being sent as promised, I presume they may have been misinformed.

When we advance farther we get into the region of tradition and improbability; and it would ill become me to trouble a Society, whose professed object is truth and science, with the numerous and wonderful relations which many grave and learned authors have recorded as facts they themselves believed; yet I still think we have no authority to reject absolutely every relation

relation of this kind, when AMBROSE PAREY, a very honest though credulous man, tells, that in his time, in the parish of Sceaux, near Chambellay between Sarte and Maine, the mother of the then living lord of the noble house of MALDEMEURE had, in the first year of her marriage, brought forth twins, in the second triplets, in the third four, in the fourth five, and in the fifth year six children at one birth, of which labour she died; and when he adds, that of these *last six* one is yet alive, and is now Lord of Maldemeure, how can we disbelieve this circumstance? This story may very possibly be inaccurately stated, yet the whole cannot be a fiction, as it was published among the very people, and in the age when it happened, and never has been since contradicted so far as we know. Though the wonderful regularity of the progress gives an appearance of fable to the whole, yet we must believe the thing to be possible: and that this then existing lord might be the only one of the six who lived long enough to be born at the full time, in a mature state; the whole, or most of the other five, as we have sometimes seen in cases of twins, having been born as dead abortions, which had never arrived to a bulk sufficient to interfere with his growth.

I leave the learned to pay what degree of credit they please to the wonderful relations we read of the extreme fertility of the women of Egypt, Arabia, and other warm countries, as recorded by ARISTOTLE, by PLINY, and by ALBUCASIS, where three, four, five, and six children are said to have been frequently born at once, and the greatest part of these reared to maturity; and will only say, that though a late traveller M. SAVARY gives ample testimony of the extreme general fertility of Egypt in all vegetable and animal productions, and particularly

ticularly of its abundant population, he mentions nothing of the numerous births recorded by the ancient naturalists and historians.

Of still more fruitful births I will pass over a number of instances which I could adduce from JOHANNES RHODIUS, LUCAS SCHROECKIUS, CASPAR BAUHIN, JOHANNES HELVIGIUS, BIANCHI, and others, and finish with one case more, recorded by PETRUS BORELLI in his Second Century of Observations, published at Paris in the year 1656; a collection indeed filled with many wonderful stories, though by a man of equal integrity and ingenuity: he tells us, that in the year 1650, just five years before, the lady of the then present Lord DARRE produced at one birth eight perfect children, which he owns was a very unusual event in that country.

I think it totally unnecessary to pursue this enquiry farther; but must observe, that the present is the only case I have found, where the children were all females; that the males have in all the other cases been at least equal, and generally the most numerous; that in many of them, at least a part was dead born; and that most commonly the rest died in a short time. It is thence clear, that those numerous births are certainly unfavourable to population, as very few indeed of those children can be carried to near the full term of pregnancy, and fewer still to that degree of strength that admits of their being reared, where more than two are born at one time.

As from Mr. JOHN HUNTER's very curious Experiments and Observations, read lately to this Society, on the Procreation of Swine, we are led to believe, that a certain determined number of ova, capable of receiving male impregnation, are originally formed in each ovarium; and which number, when exhausted, the female constitution has no power to renew; if this be the

true

true account of the oeconomy of nature in this particular, which has every appearance of probability, those numerous births must occasion a very fruitless profusion and waste of the human race, and become every way detrimental to its increase.

From the united testimony of all the foregoing cases, it is undeniably clear, that the females of the human species, though most commonly uniparous, are, in certain circumstances to us unknown, every now and then capable of very far exceeding their usual number; and I must again repeat, that it does not appear that we can set any bounds to the powers of nature in that respect; or pretend, as some have done, with certainty to say, what may be the utmost limits of human fertility.

